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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,697	02/11/2002	Richard P. Tumminelli	P1507US78038	4405

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EXAMINER

GRAY, JILL M

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 12/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/073,697

Applicant(s)

TUMMINELLI ET AL.

Examiner

Jill M. Gray

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-8, 10-12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crossland et al, 6,474,106 B1 (Crossland).

Crossland teaches a method of manufacturing an optical fiber preform and preform formed thereof. Said method comprising providing a silica based preform core comprising at least one dopant and depositing a porous glass soot layer over said core, per claim 1 and consolidating or sintering to collapse the core to create a preform with a reduced diameter, per claims 5 and 6. See column 8, lines 1-23. The soot layer is deposited on the preform core by a chemical vapor deposition process, as required by

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claim 4. See column 5, lines 61-64. The dopant can be a rare earth metal such as erbium oxide or aluminum oxide, as required by claims 2-3 and the resulting optical fiber preform is of the type contemplated by applicants in claims 7-8 and 14. See column 5, lines 42-60. As to claims 10-12, Crossland does not specifically teach that the thickness of the soot layer is such as to alleviate viscosity reducing effect of the dopant. Nonetheless, Crossland teaches that the thickness of the soot layer may be adjusted to affect the refractive index of the core and cladding. See column 6, lines 34-45. Moreover, as it relates to the thickness of said layer, it is the position of the examiner that this limitation amounts to no more than a change in size, wherein changes in size ordinarily are not a matter of invention. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Therefore, the prior art teachings of Crossland would have rendered obvious the invention as claimed in claims 1-8, 10-12 and 14.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Campion et al*, 6,532,775 B1 (*Campion*) in view of Crossland, '106 as applied above to claims 1-8, 10-12 and 14,

Campion teaches a method of manufacturing an optical fiber preform comprising providing a fiber preform tube predominately of silica and depositing an outer layer predominately of silica on the inner surface of the preform tube over the core material (claims 1, 7, 9 and 14) and hot-drawing to form a fiber (claim 6). The outer layer is applied using a modified chemical vapor deposition process and the preform tube is collapsed as required by claims 4-5. See column 2, lines 19-42. *Campion* does not teach doping the core material.

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Crossland is a set forth above and teaches a method comprising providing a silica based preform core comprising at least one dopant and depositing a porous glass soot layer over said core, per claim 1 and consolidating or sintering to collapse the core to create a preform with a reduced diameter, per claims 5 and 6. See column 8, lines 1-23. The soot layer is deposited on the preform core by a chemical vapor deposition process, as required by claim 4. See column 5, lines 61-64. The dopant can be a rare earth metal such as erbium oxide or aluminum oxide, as required by claims 2-3 and the resulting optical fiber preform is of the type contemplated by applicants in claims 7-8 and 14. See column 5, lines 42-60. In addition, Crossland teaches that doping optical fibers with a rare earth metals such as erbium oxide and alumina allows amplification of optical signals and result in enhanced optical properties, such as low ripple value and an expanded bandwidth. See column 1.

It would have been obvious to modify the teachings of Campion by doping the core material with a dopant such as alumina or erbium oxide with the reasonable expectation of enhancing the optical properties of the resultant optical fibers. Regarding claims 10-13, it is the position of the examiner that limitations with regard to the thickness of the layer amounts to no more than a change in size, wherein changes in size ordinarily are not a matter of invention. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Therefore, when considered as a whole, the combined teachings of Campion and Crossland would have rendered obvious the invention as claimed in present claims 1-14.

No claims are allowed.

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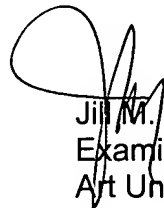
Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 703.308.2381. The examiner can normally be reached on M-F 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 703.308.0449. The fax phone number for the organization where this application or proceeding is assigned is 703.872.9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.0651.


Jill M. Gray
Examiner
Art Unit 1774

jmg